The German Market for E-Learning Systems

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Summary

Despite Germany's dominance in the Information Technology (IT) and e-commerce sectors in Europe, the German market for e-learning remains underdeveloped - below average, lagging behind the UK and Scandinavia and standing roughly on par with Italy and Spain.

E-learning, here defined as support, delivery, or enhancement of learning or training via the internet or intranet, includes two types of training: Asynchronous, traditional e-learning that is self-paced, and synchronous learning carried out in real-time with a facilitator. The market encompasses all content development, technology, and support services necessary to implement and maintain e-learning systems. Germany's mediocre status in this sector results from a low acceptance of e-learning technologies, caused by an absence of success stories and support systems. The hesitance that has stifled the market, however, is slowly diminishing, and virtually all market indicators suggest huge opportunities for the e-learning sector in the future.

Market Overview

Taking into account demographics, economics, education, technology, language, and demand for U.S. education methods, Germany should rank very high in the adoption-rate of e-learning. Germany has the largest economy in Europe and a competitive education system; its population has a 99% literacy rate, 83% secondary education rate, and a 23% advanced education rate. 34% of Germans speak English, and 97% of German students must take English at some point during school. Additionally, Germany has an Internet penetration rate of 56.4%, a figure that is slightly above the EU average (2005).

Despite such favorable indicators, e-learning is less integrated into German institutions of higher education and German companies than the EU average. In the higher education sub-sector, few institutions have well-integrated e-learning systems, and a great number of institutions can be characterized as "skeptical" towards e-learning.

Table 1: Level of E-learning Integration in Higher Education

	Germany	EU
Front-runners	11%	16%
Collaborators	43%	33%
Self-sufficient	21%	36%
Skeptical	25%	16%

Source: Multimedia Kontor Hamburg 2004

"Front-runners" are institutions that have enacted a clear IT strategy, allocated substantial resources to e-learning technology, worked for acceptance of e-learning among teachers and for international cooperation in this sector. "Collaborators" are institutions that want to increase e-learning offerings but are not prepared to make the

necessary financial commitments. "Self-sufficient" institutions do not allocate substantial funds to e-learning technology or seek private or international support. "Skeptical" institutions only participate to a small degree in IT development.

The German market for e-learning is not extensive, offering 324 distance learning service providers—fewer than the United States (3,193), UK (688), or Canada (450). Germany also has a lower ratio of e-learning providers per 10,000 students and 100,000 inhabitants than the United Sates, UK, Canada, Australia, or France. In comparison to other EU countries, Germany remains on the conservative side in adopting e-learning. Most German companies active in this segment are still relatively small, and the market is fragmented. Despite the fact that 24% of all EU members speak German as a mother language, German-language e-content remains very limited.

Business Training/Life-long Learning

Of the top 350 German companies, only one in seven spends in excess of USD 1.2 million on e-learning systems and content per year—an amount that represents only a small percentage of spending on training. In large companies, only 12% of training time is devoted to pure e-learning, while an additional 17% of training time is devoted to blended learning (2003). In most small- to medium-sized companies, e-learning systems are almost non-existent.

The apparent lack of e-learning solutions in German companies is the result of many factors, a lack of acceptance being perhaps the most important. Despite the clearly publicized benefits of e-learning, firms are hesitant to invest in e-learning systems. Comparatively little research and few pilot programs have been completed in Germany, and limited technical support is available.

Additionally, the e-learning market has failed to meet market expectations. In the midst of the Dot-Com boom, the sector was expected to grow exponentially. During the recession of 2001 and 2002, however, the market did not even come close to meeting expectations, and many e-learning companies went out of business. Most industry experts now realize that the original growth projections were unreasonable, but many companies are now hesitant to front the large investments needed for a technology that is viewed not only as unproven but also as lacking human interaction.

Another reason for the slow acceptance of e-learning is the inflexibility of labor and employment. On-the-job-training in Germany is much more institutionalized than in the United States. While U.S. companies may independently implement training programs, German training courses are often agreed on by education/training authorities, employers, and unions before being implemented industry-wide (with the exception of multi-national companies or large conglomerates). Spending on training, it seems, is not tied to short-term economic performance but to labor trends, as evidenced by the recession following the Dot-Com boom. Although spending on training in the United States and the UK decreased significantly during this time as a quick way to cut costs, spending on training in Germany stayed relatively stable, with a slight decrease in spending on traditional training and a slight increase in spending on e-learning.

Higher Education Courses

E-learning in German higher education institutions suffers from the same low acceptance rate as in business training. Although some institutions do fully integrate e-learning, approximately the same percentage offers no e-learning services at all. The great majority is reportedly considering e-learning - but only one quarter of universities currently offer courses solely on-line. E-learning, nevertheless, is slowly gaining acceptance in German universities, with the great majority of students having no reservations about taking online courses. 25% of all teachers in the higher education

field, however, view e-learning solutions as less effective than traditional education, 50% consider traditional and e-learning systems as equally effective, and 25% characterize e-learning solutions as more advantageous than traditional methods.

The level of integration of e-learning into education services depends greatly on the type of school, the subjects being taught, location of the school, and number of students. Universities of Applied Sciences, or technical colleges (Fachhochschulen), that specialize in mathematics and technology exhibit the highest acceptance and utilization of e-learning, with 93% offering some form of e-learning, although only 29% offer online courses. Universities follow close behind, with 93% offering some form of e-learning and 22% offering online courses.

Prevalence of E-Learning in German Institutions of Higher Learning

Type of Institution	E-Learning Presence	Pure E-Learning	Blended-Learning	Online Support
University	93%	22%	53%	78%
Technical	93%	29%	47%	67%
Art/Music	80%	10%	10%	50%
Other	75%	13%	13%	38%
Size				
Small	69%	-	25%	50%
Medium	94%	6%	24%	59%
Large	98%	33%	52%	73%
Ownership				
Public	96%	28%	46%	68%
Private	90%	10%	50%	90%
Parochial	50%	-	-	25%
Region				
East	94%	19%	25%	44%
West	91%	24%	46%	72%

Source: Multimedia Kontor Hamburg 2004

Universities also lack the necessary technological support and funds to fully integrate e-learning into education. German universities have historically been entirely supported by the state and are tuition-free. Despite the fact that 98% of German students attend public institutions, state funding is often inadequate. The German government spends an average of USD 9,625 per student in higher education. Although the amount the government pays is higher than average for OECD countries, the overall funding universities in Germany receive is actually lower than the funding for universities in other OECD countries, as universities in Germany cannot obtain funds from private sources or students. The government would need to almost double its spending to meet the funding needs of public universities and institutes.

Due to the high costs of professor training, user advice, materials, development, installation, and technical support, e-learning remains a hypothetical goal for many German institutions of higher education. If a mid-size university with 20,000 students and 1,000 teachers were to offer 30% of its courses online, 1,000 online activities would need to be technically supported every semester. Most German universities do not feel that they can afford to allocate funds from already tight budgets, especially since e-learning systems are still considered unproven solutions and often not accepted by many faculty members.

Because German university courses are free, students and adults engaging in life-long learning do not have financial incentive such as American students to use e-learning programs.

Market Trends

Acceptance of e-learning systems is increasing in Germany, but many potential users still see a lack of research in the sector. Since 1999, the Federal Government has officially supported IT-based training, supplying around USD 606 million to programs such as "New Media in Education, "Learnet," and "MobilMedia." In 2005, the government announced plans to allocate USD 4.6 million to the e-learning programs "Content-Sharing" and "Initiative for Quality in German e-learning" (Q.E.D.). "Content-sharing" encourages cooperation between content providers and educators to create smoother exchanges of content and reduce costs. Q.E.D. focuses on creating standards and promoting innovation in the German market. It establishes the quality brand "E-learning made in Germany," in order to reduce the risks associated with investments in e-learning.

Institutions of Higher Education

Germany's higher education system is slowly changing. After years of free tuition, the debate to introduce minimal charges to support the under-funded education system has intensified. In January of 2005, German courts declared a law preventing universities from charging tuition unconstitutional and cleared the way for universities to introduce fees. Most universities are expected to charge an average of USD 1,319 per year. Despite the relatively small size of the fees, their implementation should increase demand for e-learning services, including services from the United States, as universities and students will most likely begin looking for more cost-effective options. Many German institutions of higher education previously hesitated to implement e-learning solutions, as they could not pass the costs onto students due to lack of tuition.

The structure of the German university system is also set to change over the next five years. In order to unify higher education in the EU and increase mobility of European students, EU countries pledged in the Bologna Process of 1999 to implement a two-tier system of undergraduate and masters degrees. Although limited progress has been made on this pledge to date, German universities are expected to introduce this system in the next few years, which would mark a departure from the current one-tier system (*Diplom)*. Such a change may offer potential for U.S. suppliers of educational systems U.S. companies can help German universities adapting technology to the new system. Additionally, the two-tier model offers more flexibility, opening the marketplace with more opportunities for lifelong learning.

Business Training/Life-long Learning

Since the introduction of e-learning to Germany, the market has been comparatively fragmented, with many companies offering one part of an e-learning system technology, content, or support services. Due to the lack of necessary infrastructure, however, many companies are increasingly looking toward companies that offer complete service packages. 58% of German e-learning companies offer both content and technology, and 55% offer additional consulting services. Only 22%, however, offer after-sales customer service in addition to supplying content and technology.

As more users look for full service, these percentages can be expected to increase. Although 67% of companies consider cost reduction to be one of the top three reasons to introduce e-learning, 46% also name lack of internal capabilities as a reason to adopt e-learning systems, and 43% want access to best practices and talent.

Import Market

The global market for e-learning is expected to increase by 27 percent per year until 2008, resulting in a market size of USD 21 billion. Growth, however, has been uneven, and the German market has expanded comparatively slowly. Exact market size figures, however, are difficult to estimate. Conflicting reports place the German market anywhere between USD 364 million and USD 2.4 billion, although most point toward a market of just under USD 1.2 billion. The market, however, is expected to exhibit steady growth until 2008 and to occupy an increasingly important position in the total market for further education and training, in which it was estimated to represent 2% in 2002, 15% in 2004, and 30% in 2005.

Year	World Market Size (USD)
2003	6.5 billion
2004	8.3 billion
2005	10.5 billion (estimate)
2006	13.3 billion (estimate)
2007	16.9 billion (estimate)
2008	21.4 billion (estimate)

Source: IDC and Learntec 2005

Due to the nature of e-learning systems and purchases, data on imports and exports is not available. The United States, however, clearly dominates the world market in the export of e-learning services, followed by the UK, Australia, and Canada, all of which are net exporters. These countries hold the top positions as a result of highly competitive educational markets and language services, as English is quickly becoming the language not only of business but also of education.

The United States exports more e-learning services to Germany, it is estimated, than any other country. This share, nevertheless, is not particularly large, due to the limited size of the German market and domestic competition. Although U.S. companies experience heavy competition from firms from the UK, Australia, and Canada, several of the large U.S. companies have broken into the German market. These include Thomas NetG, which has provided its services to BMW, DaimlerChrysler, Deutsche Bank, Osram, Schott Glass, and Siemens, and SkillSoft, which has provided its services to Accenture, Deutsche Telekom, Deutsche Versicherungsanstalt DVA, and IBM. Both of these companies have had success in the German market due to the presence of subsidiaries in Germany. U.S. firms have an increasing potential to be successful on the German market, due to the marked presence of English-language e-learning services in the German market and the forecasted demand growth.

Competition

Most German e-learning companies focus on the domestic market and play a very small role internationally when compared to firms from the United States, the UK, and Australia. Almost 60% of German e-learning suppliers solely address their national market, 35% address only the German speaking countries, 22% target all of Europe, and 25% target the global market. This limited focus is generally due to the fact that most companies in the fragmented German system remain small, but even most of the larger companies conduct almost all business in Germany.

The most successful companies in Germany typically offer a range of IT services in addition to e-learning or develop partnerships to achieve international distribution. An example is IDS Sheer, a business process company that consults in all areas of management and has offices in over twenty countries around the world, including the United States. IMC AG, Europe's leading full-service e-learning provider, has provided services to Daimler-Chrysler AG, Deutsche Bank AG, Deutsche Telekom AG, IBM, Lufthansa AG, Allianz, Bayer, Bertelsmann, BMW, Ernst & Young, and many universities in Germany. Although IMC only has offices in Austria, Switzerland, and Germany, it has partnered with a number of companies to increase its international presence.

The market, nevertheless, is becoming increasingly promising for small companies. Germany now ranks second in the EU e-learning sector in number of start-ups with a 29% share of entrepreneurs in the market.

The most important competitive factors for the e-learning market in Germany are the provision of complete service packages and well-developed support systems. Most German companies recognize the high initial costs of investing in e-learning systems and will not buy non-generic products to avoid high prices. Most companies want e-learning systems that can be tailored to their individual systems and are adapted on the basis of language, learning style, content, and media. Companies that can offer high quality products, proven knowledge of the industry and buyer, supply success stories, and offer good service-level agreements will be the most successful.

End-Users and Best Prospects

In the business sector, the end-users of e-learning technology are the larger companies. Smaller U.S. providers should focus on the medium- to large-sized companies with domestic distribution, as the multi-national companies and conglomerates will likely seek out larger providers. These firms are also strong users of English courses, as English has quickly become the language of business, and a number of German adults are still looking to gain language proficiency.

In the higher education sector, the end-users of e-learning technology will continue to be the larger, public universities, at least in the near future. In the next five to ten years, smaller universities and institutes will also likely seek out e-learning systems. Universities and institutes that have a high concentration of students in the areas of mathematics, technology, the engineering sciences, and economics seek e-learning services at a much higher rate than those with a focus in the humanities or the life sciences. Due to the fact that information in these fields must be continually updated, technical colleges are also more receptive to changes in teaching styles. Additionally, vocational schools tend to have a greater amount of private funding, which will heighten their ability to afford e-learning systems.

The German federal government, in addition to local and state governments, will also be a potential end-user of e-learning systems, as governments are increasingly providing services online. Schleswig Holstein, one of the sixteen federal German states, recently introduced an e-government platform designed to teach citizens and companies about the federal administration and its services. The platform is based on Microsoft's .NET and was developed by Dataport, a German public e-government service provider, and Microsoft. The federal state of Rheinland-Pfalz also chose to introduce the e-government platform 'rlp-Middleware,' developed by Dataport in conjunction with LDI Mainz, a German IT service provider.

Market Access

Certification and Permits

EU-wide patents can be obtained by filing an application with European Patent Office in Munich. Patents in the European Union are valid for 20 years, but extensions can be granted for products that require long periods of time for approval.

Duties

Germany operates under the Community Integrated Tariff (TARIC) system, which applies duties to all imports from non-EU countries. Germany uses the Harmonized System (HS) to classify goods that are traded internationally. All products must have a HS number, which determines the duty. Although information is freely exchanged between the U.S. and Germany, teaching materials may be subject to a tariff of 1.4%.

A VAT (value-added tax) is applied to all goods and most services imported to Germany. The tax is typically 16%. No VAT, however, is levied on sample goods, advertising materials for goods, or goods that are only temporarily imported (i.e. for exhibits at trade fairs).

Standards

Although clear standards have not yet been established for e-learning systems, the German government and private associations are both working to create guidelines for e-learning quality, focusing heavily on interoperability and multilingualism. The German federal government recently introduced the program "Innovation and Future Technologies in SMEs—a High-Tech Master Plan," supporting in particular the Deutsches Institut fuer Normung (DIN), or German Standards Institute. The government program "Initiative for Quality in German e-learning" establishes the quality brand "E-learning made in Germany," in an attempt to introduce standards and promote innovation in the young e-learning market. Beuth Verlag, a subsidiary of DIN, recently published PAS 1032-1, a reference model to insure quality practices in the areas of planning, development, performance, and evaluation of e-learning systems. This proposal is a draft of the coming "ISO-Qualitätsstandard für E-learning" (ISO-quality standards for e-learning) and can be downloaded free-of-charge by registering with http://www.mybeuth.de/ (in German).

Market Entry

The best way for U.S. companies to enter the German market is to form partnerships. Many German companies in the e-learning sector are forming both international and domestic partnerships and associations. Examples include Bildung Online (Online Education: http://www.b-o.de/), a partnership of fifteen leading publishers in Germany, and BIG (Bildungswege in der Informationsgesellschaft), a joint initiative of the Bertelsmann Foundation and the Heinz Nixdorf Foundation that seeks to support innovation for new teaching methods. When looking for a good prospective partner, companies should keep in mind the qualities necessary in the e-learning market, including market presence, industry experience, strong sales and distribution channels, mature business models, and strong infrastructure or content.

U.S. companies should also note the stronger labor laws of the German market, which can interfere with e-learning systems that share employee skills data. Some companies using U.S. LMS systems have had to disable the learner-skills tracking functions used by some American employers due to privacy regulations.

Key Contacts

Standards Agencies

German Standards Institute
(Deutsches Institut fuer Normung - DIN)
German Information Centre for Technical Rules (DITR)
10772 Berlin
Tel: 0190/882600
Fax: 030-2628125
Internet: http://www.din-katalog.de/
Email: walser@aoe.din.de

Association of Electrical Engineering Electronics and Information Technology
(VDE - Verband der Elektrotechnik Elektronik Informationstechnik e.V.)
Stresemannallee 15
60596 Frankfurt am Main
Tel: 069-63080
Fax: 069-6312925
Internet: http://www.vde.com/
Email: service@vde.com

Other Important Agencies

Federal Ministry of Economics and Labor
(Bundesministerium fuer Wirtschaft und Arbeit, BMWA)
Referat Kommunikation und Internet
Scharnhorststr. 34-37
10115 Berlin
PO Box: 11019 Berlin
Fax: 030-2014-5208
Internet: http://www.bmwa.bund.de
E-Mail: info@bmwa.bund.de

Federal Ministry of Education and Research
(Bundesministerium fuer Bildung und Forschung, BMBF)
Public Relations Department
Hannoversche Straße 28-30
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Tel.: +49-1888-570
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Internet: http://www.bmbf.de/
E-Mail: information@bmbf.bund.de

Forum DistancE-Learning
Der Fachverband für Fernlernen und Lernmedien e. V. (DFV) (The German Association for distant learning)
Doberaner Weg 22
22143 Hamburg
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E-Mail: info@mmkh.de

E-learning Initiative of the European Union
Internet: http://www.elearningeuropa.info/
Email: info@elearningeuropa.info

Online magazine covering E-learning market in Germany
http://www.elearning-journal.de/

Government-supported, comprehensive website of e-learning opportunities in Germany:
http://www.studieren-im-netz.de/

Trade Shows

Germany hosts leading international trade events in virtually every industry sector, attracting buyers from around the world. Over 90% of products and technologies are introduced into the German market via trade fairs. U.S. exhibitors should be prepared to take full advantage of the business opportunities presented at these events. While U.S. exhibitors and visitors can conclude transactions, all attendees can use major German trade fairs to conduct market research, see what their worldwide competition is doing, and test pricing strategies. Upcoming trade fares relevant for the educational services sector include:

Online Educa Berlin
November 30-December 2, 2005
ICWE GmbH
Leibnizstrasse 32
10625 Berlin, Germany
Tel: +49 30 327 61 40
Fax: +49 30 324 98 33
Internet: http://www.online-educa.com/en/
E-Mail: info@online-educa.com

Learntec
February 14-16, 2006
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